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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,697

11/03/2006

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246.1001

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20311 7590 03/06/2009
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EXAMINER

LAZO, THOMAS E

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

03/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,697	Applicant(s) KAUSS ET AL.	
	Examiner Thomas E. Lazo	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/12/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-36 is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's amendment filed 11/12/08 is acknowledged.

Response to Arguments

Applicant's arguments filed 11/12/08 have been fully considered but they are not persuasive. Applicant argues that the pressure regulators 8,9 of Ishizaki et al. (6,561,751) are arranged such that the hydraulic consumer with the highest load pressure diminishes when there is insufficient discharge from the pump and changes the geometric relationship between two consumers unpredictably.

The examiner respectfully disagrees. The pressure regulators 8,9 of Ishizaki are arranged to maintain a constant front to rear differential pressure of the operational valves 6,7 unrelated to the magnitude of the load of the hydraulic cylinders. In doing so, the pressure regulators 8,9 maintain the ratio of Q1 to Q2 constant in any load condition which would include an overloaded condition when discharge from the pump would be insufficient. Therefore the motional path of the equipment does not change as intended by the invention of Ishizaki et al. See Ishizaki et al. col. 2, lines 22-34, col. 4, lines 1-12, and col. 11, lines 37-47.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishizaki et al. (JP 2001090703 A). See US 6,561,751 B1 for a translation. Ishizaki et al. discloses a control device for a work appliance with a scoop 11 held on an extension arm 10 for a wheeled loader, an extension arm hydraulic cylinder 2, a scoop hydraulic cylinder 3, a pump 1 supplying the cylinders 2,3 with pressure medium from a tank 14, an extension arm supply valve 6, a scoop supply valve 7, wherein the control device is operative to activate each of the valves 6,7 by holding the ratio of the pressure medium quantities supplied to the cylinders 2,3 at a constant value independently of the size of a control signal supplied to the extension arm supply valve 6, the motional relationship between the first and second hydraulic cylinders 2,3 controlled by the two valves 6,7 is maintained even in the event of undersaturation of pump delivery, each of the valves 6,7 is provided with a slide (not shown) acted upon by an adjustable control pressure, the control pressure deflects the slide counter to the force of a spring (not numbered), the positions of the respective slides being a measure of the force resulting from the control pressures acting on the slide and from the surfaces of the respective cylinders 6,7 acted upon by pressure, each of said slides is provided with a notch (port) which runs in its longitudinal direction and determines the size of the passage cross section of the respective valve 6,7 and which provides a respective passage cross section for the respective valve 6,7 determined by the position of the slide, each of said valves 6,7 is assigned a pressure compensator 8,9 which keeps the pressure drop of the valves 6,7 at the same value, the passage cross section of each of the two valves 6,7 changes linearly with the control pressure supplied to them, a surface of the slide of the extension arm

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supply valve 6 which is acted upon by the control pressure is equal to a surface of the slide of the scoop supply valve 7 which is acted upon by the control pressure, the inlet of the scoop supply valve 7 for the control pressure is preceded by a valve arrangement 72,74, via which said valve can be supplied with the control pressure for the rotational movement of the extension arm 10 or with the control pressure for the rotational movement of the scoop 11, the valve arrangement 72,74 is constructed as a shuttle valve 72,74, one inlet of which is supplied with the control pressure for the rotational movement of the extension arm 10 and the other inlet of which is supplied with the control pressure for the rotational movement of the scoop 11, in the control pressure line leading to the first inlet of the shuttle valve 72,74, a switching valve 71,73 is arranged, which, in one position, interrupts the supply of the control pressure for the rotational movement of the extension arm 10 to the inlet for the control pressure of the scoop supply valve 7, and at the same time supplies the first inlet of the shuttle valve 72,74 with a pressure (tank pressure) which is lower than the respective control pressure for the rotational movement of the scoop 11 or is equal to said control pressure, the valve arrangement 72,74 interrupts the supply of the control pressure for the rotational movement of the extension arm 10 in the lowering direction to the inlet for the control pressure of the scoop supply valve 7 when this pressure overshoots an adjustable value, the switching valve 71,73 interrupts the supply of the control pressure for the rotational movement of the extension arm 10 in the raising direction to the first inlet of the assigned shuttle valve 72,74 when the pressure for the rotational movement of the extension arm 10 in the lowering direction overshoots an adjustable value, the notch (port) of the slide of the scoop supply valve 7 is formed in such a way that, when the slide of the scoop supply valve 7 is acted upon by a control pressure which is higher than the control pressure, required for

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the maximum pressure medium quantity, for the extension arm supply valve 6, the passage cross section of the scoop supply valve 7 increases with a rise in control pressure to a greater extent than in the range below the control pressure, required for the maximum pressure medium quantity, for the extension arm supply valve 7, and the spring constant of the spring acting on the first slide is equal to the spring constant of the spring acting on the second slide.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishizaki et al., as applied to claim 14 above, in view of Emanie et al. (6,308,612). Ishizaki et al. discloses all of the claimed subject matter except for a counterholding valve controlled by the inflow pressure and arranged in a line leading from a cylinder acted upon by a pulling load to the tank.

Emanie et al. teaches for a control device for a work appliance with a scoop B held on an extension arm 10 for a wheeled loader, an extension arm hydraulic cylinder 16, a scoop hydraulic cylinder 19, a pump P supplying the cylinders 16,19 with pressure medium from a tank R, an extension arm supply valve 25, and a scoop supply valve 26 and that there is a counterholding valve 58 controlled by the inflow pressure and arranged in a line leading from a cylinder 19 acted upon by a pulling load to the tank R for the purposes of preventing uncontrolled operation of the cylinder. See Emanie et al. col. 7, lines 55-68.

Since Ishizaki et al. and Emanie et al. are both in the same field of endeavor, the purpose disclosed by Emanie et al. would have been recognized in the pertinent art of Ishizaki et al.. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the control device of Ishizaki et al., to include a counterholding valve controlled by the inflow pressure and arranged in a line leading from a cylinder acted upon by a pulling load to the tank for the purposes of preventing uncontrolled operation of the cylinder.

Allowable Subject Matter

Claims 25-36 are allowed. The improvement comprises two pressure compensators of which one is arranged downstream of the passage cross section of the one valve and the other downstream of the passage cross section of the other valve.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thomas E. Lazo/
Primary Examiner,
Art Unit 3745
March 2, 2009